

**Figure 1**  
**Current Nitrogen Fertilizer Production**

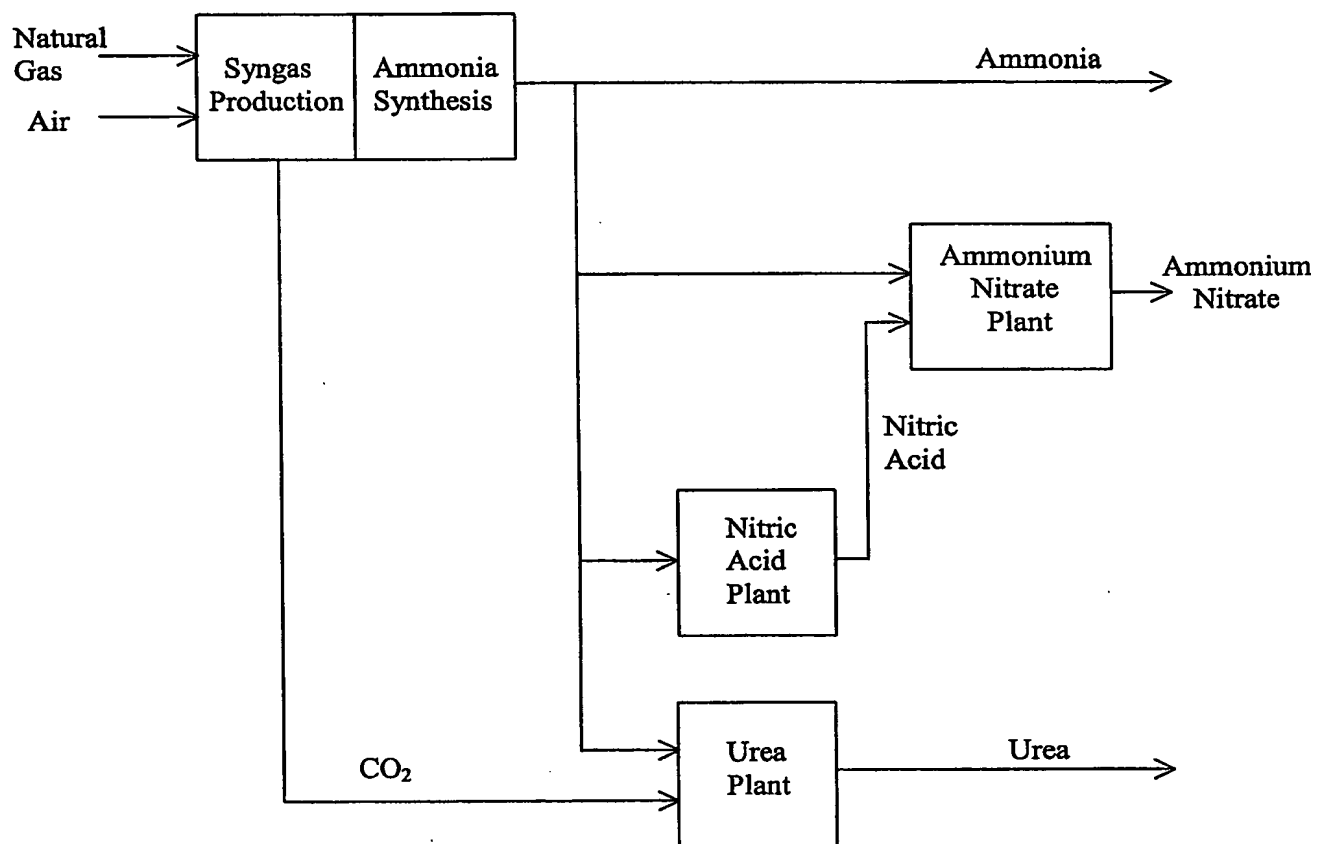
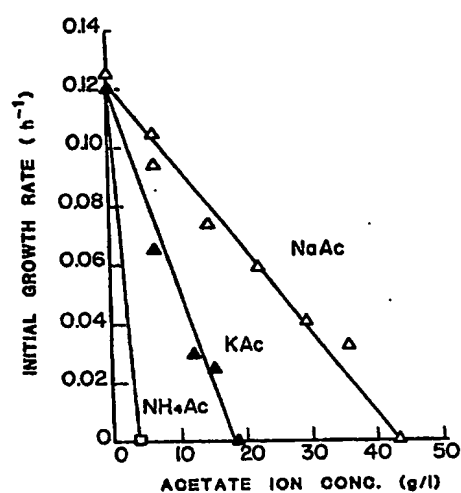
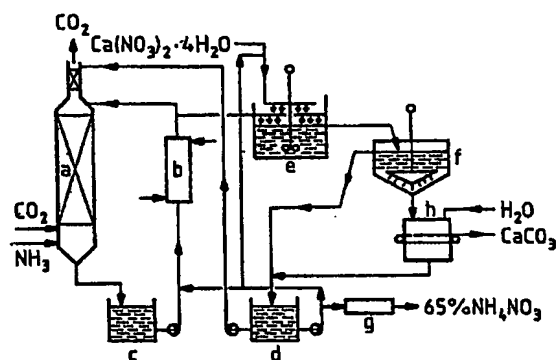


Figure 2



Fermentation Inhibition  
by Ammonium Ion  
Taken from Wang and Wang (9)

Figure 3



BASF Process Sketch  
Taken from Zapp et. al.

**Figure 4**  
**Integrated Organic Acid and Ammonium Nitrate Production**

